GOVERNMENT OF INDIA
SCIENCE AND TECHNOLOGY
LOK SABHA

UNSTARRED QUESTION NO:2379
ANSWERED ON:04.12.2001
NANO FILTRATION DEVICES
AMBATI BRAHMANAIAH

Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether the Government have developed the Bacteria and virus-free water filtering devices for all in rural areas:

(b) if so, whether the Government have launched any scheme to distribute such "Nano Filtration Devices" ;

(c) whether said Nano Filtration Devices can be used in areas having brackish water ;

(d) if so, the time likely to be taken to supply such machines in the coastal areas; and

(e) the cost and capacity of such machines ?

Answer

MINISTER OF HUMAN RESOURCE DEVELOPMENT, MINISTER OF SCIENCE AND TECHNOLOGY AND MINISTER OF DEVELOPMENT (DR. MURLI MANOHAR JOSHI)

a) & b) : CSIR through its National Chemical Laboratory(NCL), Pune has developed the ultrapore filtration membrane technology for water purification. Using this membrane, water can be purified free of pathogenic species like viruses, bacteria cysts, spores, etc. The mechanically operated prototype unit using this membrane and hand pump assembly has been prepared and around 50 such units were distributed in the cyclone affected areas in Orissa in 1999 and to a few NGOs in different

parts of the country for field testing and demonstration. The knowhow for the membrane and the device has been transferred to a company, which is being supported by the Technology Development Board, for commercial manufacture.

c) This membrane is not suited for removing salt from brackish water. Reverse Osmosis membranes and ED stacks developed by CS&MCRI, Bhavnagar, another constituent unit of CSIR , are uselful for this purpose .

d) Does not arise.

e) The cost of a hand pump operated device of 100 litre/hour capacity is around Rs.12,000.